

ABSTRACT

An object of the present invention enables provision of an optimum shape design method in which an optimum shape of a cushioning material used in cushioning packaging can easily and adequately be designed, and an optimum shape design system in which the optimum shape design method is used. In a configuration of the optimum shape design system is characterized by providing an optimizing control unit 2a. The optimizing control unit 2a detects a correlation among CAD data M of a cushioning material 4 defined by a CAD unit 2b, a mechanical response amount detected by a mechanical response amount calculation unit 2c, manufacturing decision information detected by a manufacturing decision detection unit 2d, and manufacturing cost information detected by a cost calculation unit 2e. Then, the optimizing control unit 2a updates the CAD data M of the cushioning material 4 until an optimum shape of the cushioning material 4 is detected based on the correlation. In the optimum shape, the mechanical response amount satisfies design conditions of the cushioning material 4, the cushioning material 4 is producible, and a minimum manufacturing cost is obtained. Then, the optimizing control unit 2a updates the correlation based on the changed CAD data M, and the optimizing control unit 2a detects the optimum shape of the cushioning material 4 based on the updated correlation.